### Polygonum austiniae Greene

Austin's knotweed Polygonaceae (Buckwheat Family)

Status: State Threatened

Rank: G4S1

**General Description:** Low, basally branched and ascending to erect, more or less scurfy (covered with scale-like particles) annual, usually 2-4 (but sometimes up to 8) inches tall; leaves numerous, jointed at base, the lower ones ovate or elliptic to broadly oblanceolate, usually 3/16 to  $\frac{2}{3}$  inch long and  $\frac{1}{2}$  to  $\frac{1}{3}$  as broad, narrowed to a very short petiole, gradually reduced and becoming sessile upward and transitional to the uppermost small bracts; stipules ½ to 3/16 inch long, eventually lacerate; flowers 1-4 in the axils of all but the lowermost leaves, in slender open racemes, soon reflexed, the pedicels 1/16 inch long; perianth about 1/16 inch long, connate for 1/4 to 1/5 the length, the segments 5, greenish with whitish or pink-tinged margins; stamens 5-8; styles 3, distinct barely <1/16 inch long; achene with 3 salient angles (the sides concave or channeled), black, nearly smooth, shining, ½ inch long, ovate in outline but tapered to both ends.

**Identification Tips:** The species is closely related to *Polygonum douglasii*, *P. engelmannii*, and *P. majus* and intermediates are apparently common. *P. douglasii* and *P. majus* differ from the others in the size of the perianth and seeds, which are generally larger than those of *P. engelmannii* and *P. austiniae*. *P. engelmannii* differs from *P. austiniae* in having linear-lanceolate to linear-oblanceolate as opposed to broadly elliptic leaves.

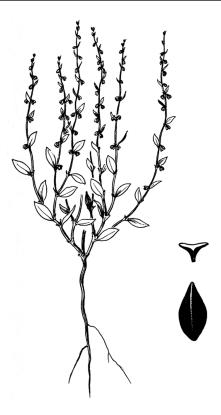
**Phenology:** Blooms from June through August.

Range: Disjunct in WA; central Oregon, to northeast California, east across southern Idaho to south-central Montana and Wyoming. Reported also for eastern British Columbia. In WA, the species is known from Grant County in the Columbia Basin physiographic province.

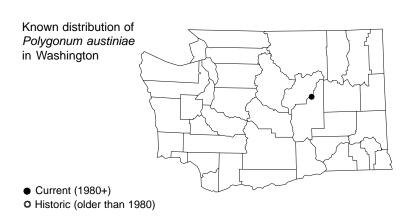
**Habitat:** Dry to moist flats or banks, from the sagebrush plains into the lower mountains, often in ponderosa pine (*Pinus ponderosa*) forest. In WA, the species occurs with thyme buckwheat (*Eriogonum thymoides*) and very sparse grass.

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**Ecology:** There is very little information available regarding the ecology of this species. The fact that it is an annual presumably makes it susceptible to fluctuations in weather and climate conditions. It is presumably also susceptible to competition with non-native invasive annuals.

**State Status Comments:** There is currently only one occurrence in the state.

**Inventory Needs:** Additional inventory is needed throughout Washington to accurately assess the status of the species in the state. There has been no systematic inventory for this species.

Threats and Management Concerns: The single known location within WA is currently under no threat. However, similar habitats nearby and elsewhere in the Columbia Basin are being converted and/or heavily impacted by grazing activities. As noted above, an increase in weedy annuals resulting from grazing pressure may pose a threat.

#### References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1964. *Vascular Plants of the Pacific Northwest, Part 2: Salicaceae to Saxifragaceae*. University of Washington Press, Seattle. 597 pp.